CLAIM AMENDMENTS

1. (currently amended) A method for performing, for the benefit of a reference provider ~~(ISP) (10)~~ having a set of users [[(C)]], connectivity evaluations over a data communication network ~~, said evaluations being made in relation~~ with respect to at least one provider [[(ISP)]] of interest ~~(12, 14), characterized in that it includes~~ the method comprising the steps of: [[-]]

selecting a plurality [[(T)]] of autonomous systems [[(AS)]] capable of forming ~~at least one between~~ a traffic source [[and]] or a traffic destination for the users [[(C)]] of said reference provider [[(10)]] through the same reference provider [[(10). -]]

supplying tables of BGP type ~~(BGP1, ..., BGPm)~~ containing information on paths available on said data communication network for the routing of said traffic with regard to the autonomous systems [[(AS)]] of said plurality of systems, [[-]]

extracting [[(104)]] from said tables the paths of BGP type inherent to said at least one provider of interest [[(12, 14)]], by finding out the paths that contain the respective number of autonomous system ~~(AS number)~~ for said at least one provider of interest [[(12, 14)]], [[-]]

extracting [[(112)]] for each autonomous system [[(AS)]] of said plurality of systems [[(T)]], oriented sub-paths between each of said autonomous systems [[(AS)]] and said at least one

provider of interest [[(12, 14)]], by identifying for each sub-path the ~~relating~~ respective length in number of hops, [[-]]

identifying, for each autonomous system [[(AS)]] of said plurality of systems [[(T)]], at least one path between the forward traffic volume [[(PI)]] and the backward traffic volume [[(DI)]] with regard to the users [[(C)]] of said reference provider, [[(10),-]]

determining [[(112)]], for each of said sub-paths respective connectivity contributions as a function of ~~said relative~~ the respective length in number of hops and of said at least one traffic volume [[(FI,DI), -]]

determining [[(118)]], for each autonomous system [[(AS)]] of said plurality of systems, the total connectivity values accumulating the connectivity contributions determined for the oriented sub-paths extracted for each of said [[each]] autonomous systems [[(AS)]], and [[-]]

accumulating the total values of connectivity determined for the autonomous systems [[(AS)]] of said plurality of systems, so as to obtain total connectivity values relating to said at least one provider [[(ISP)]] of interest [[(12, 14)]].

2. (currently amended) The method according to claim 1 wherein the steps are carried out for a plurality [[(ASB)]] of providers [[(ISP)]] of interest [[(12, 14)]] present on said data communication network.

3. (currently amended) The method as recited in claim 2~~, characterized in that it comprises~~ further comprising the step of

sorting the values of total connectivity obtained for the providers of interest [[(12, 14)]] of said plurality of systems in at least one sorted list ~~(figure 6, figure 7)~~.

4. (currently amended) The method as recited in claim 1~~, characterized in that~~ wherein it comprises the steps of: [[- -]]

identifying, for each autonomous system [[(AS)]] of said plurality of systems [[(T)]], both the forward traffic volume [[(FI)]], and the backward traffic volume [[(DI)]] with regard to the users [[(C)]] of said reference provider [[(10)]], and [[-]]

determining [[(112)]], for each of said sub-paths, respective contributions of connectivity as a function of ~~said relating~~ the respective length in number of hops and of both said volumes of forward traffic [[(Fl)]] and backward traffic [[(DI)]].

5. (currently amended) The method as recited in claim 4~~, characterized in that it comprises~~ further comprising the step of

generating values of total connectivity for said at least one provider [[(ISP)]] of interest [[(12, 14)]] disaggregated into values of total connectivity for forward traffic ~~(figure 7)~~ and backward traffic ~~(figure 6)~~.

6. (currently amended) The method as recited in claim 1~~, characterized in that it comprises~~ further comprising the step of

submitting said tables of [[BGGP]] BGP type ~~(BGP1, ..., BGPm)~~ to a clean-up operation ~~(CL1, ..., Clm)~~ to eliminate the comments contained in said tables.

7. (currently amended) The method as recited in claim 1. further comprising ~~characterized in that it comprises~~ the step of

detecting said traffic volumes through a function [[(CF)]] of NetFlow™ type .

8. (currently amended) The method as recited in claim 2 ~~, characterized in that it additionally comprises~~ further comprising the step of

selectively reallocating the transit traffic through said reference provider [[(10)]] on at least one part of said providers [[(ISP)]] of interest [[(12, 14)]] of said plurality of systems [[(ASB)]].

9. (currently amended) A system for performing for the benefit of a reference provider ~~(ISP) (10)~~ having a set of users [[(C),]] connectivity evaluations on a data communication network ~~, said evaluations being performed in relation~~ with respect to at

least one provider [[(ISP)]] of interest, the system comprising: ~~(12, 14), characterized in that it comprises -~~

tables of BGP type ~~(BGP1,..., BGPm)~~ containing information on paths available on said data communication network for the routing of traffic with regard to a plurality [[(T)]] of autonomous systems [[(AS)]] capable of establishing at least one between a source and a destination of traffic for the users [[(C)]] of said reference provider [[(10)]] through the same reference provider, [[(10), -]]

a detection module [[(CF)]] for detecting, for each autonomous system [[(AS)]] of said plurality of systems [[(T)]], at least one between the forward traffic volume [[(Fl)]] and the backward traffic volume [[(DI)]] with regard to the users [[(C)]] of said reference provider [[(10)]], and [[-]]

a processing module [[(S)]] configured for: [[-]]

extracting [[(104)]] from said tables the paths of BGP type inherent to said at least one provider of interest [[(12, 14)]], by searching for the paths that contain the respective number of autonomous system ~~(AS number)~~ for said at least one provider of interest [[(12, 14), -]]

extracting [[(112),]] for each autonomous system [[(AS)]] of said plurality of systems [[(T),]] oriented sub-paths between said each autonomous system [[(AS)]] and said at least one provider of interest [[(12, 14)]], identifying for each

sub-path the ~~relating~~ respective length in number of hops, [[-]]

determining [[(112),]] for each of said sub-paths [[,]] respective connectivity contributions as a function of ~~said relating~~ the respective length in number of hops and of said at least one traffic volume [[(FI,DI)]] with regard to the users [[(C)]] of said reference provider [[(10), -]]

determining [[(118),]] for each autonomous system [[(AS)]] of said plurality of systems [[,]] the total connectivity values accumulating the connectivity contributions determined for the oriented sub-paths extracted for each said autonomous system [[(AS)]], and [[-]]

accumulating the total values of connectivity determined for the autonomous systems [[(AS)]] of said plurality of systems, so as to obtain values of total connectivity relating to said at least one provider [[(ISP)]] of interest [[(12, 14)]].

10. (currently amended) The system as recited in claim 9, configured for performing connectivity evaluations for a plurality [[(ASB)]] of providers [[(ISP)]] of interest [[(12, 14)]] present on said data communication network.

11. (currently amended)]] The system as recited in claim 10, ~~characterized in that it comprises~~ further comprising a sorting module for sorting the total connectivity values obtained for the providers of interest [[(12, 14)]] of said plurality of systems in at least one sorted list ~~(Figure 6, Figure 7)~~.

12. (currently amended) The system as recited in claim 9~~, characterized in that -~~ wherein:

said detection module [[(CF)]] is configured for detecting for each autonomous system [[(AS)]] of said plurality of systems [[(T)]], both the forward traffic volume [[(FI)]] and the backward traffic volume [[(DI)]] with regard to the users [[(C)]] of said reference provider [[(10)]], and [[-]]

said processing module [[(S)]] is configured for determining [[(112)]], for each of said sub-paths, respective connectivity contributions as a function of ~~said relating~~ the respective length in number of hops and of both said forward traffic volume [[(Fl)]] and backward traffic volume [[(DI)]].

13. (currently amended) The system as recited in claim 12~~, characterized in that~~ wherein said processing module [[(S)]] is configured for generating total connectivity values for said at least one ISP of interest [[(12, 14)]], disaggregated into total forward connectivity values ~~(Figure 7)~~ and total backward connectivity values ~~(Figure 6)~~.

14. (currently amended) The system as recited in claim 9~~, characterized in that it comprises~~ further comprising pre-processing modules ~~(Cl1, ..., Clm)~~ to submit said tables of BGP type ~~(BGP1, ..., BGPm)~~ to a cleanup operation ~~(Cl1, ..., Clm)~~ to eliminate the comments contained in said tables.

15. (currently amended) The system as recited in claim 9~~, characterized in that~~ wherein said detection module [[(CF)]] for detecting said at least one traffic volume, includes a function [[(CF)]] of NetFlow™ type.

16. (currently amended) The system as recited in claim 10~~, characterized in that~~ wherein the providers of interest [[(12, 14)]] of said plurality of systems are equipped with a selective re-balancing module for re-balancing the transit traffic through said reference provider [[(10)]].

17. (currently amended) An information technology product, directly loadable on the internal memory of a digital computing unit and comprising portions of software codes capable of implementing the method according to claim 1, when the product is run on a computer.